

III. - Annular Eclipse of the Sun

1983 December 04



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$\Delta T = +53^m 7^s$
Globe centred on W 4°1' and N 3°8'

Circumstances	Time (UT)	Longitude	Latitude
	^h ^m	^o /	^o /
⊕ Eclipse begins; first contact with Earth	9 41.0	W 46 08.7	N 26 14.0
Beginning of southern limit of umbra	10 47.1	W 58 40.5	N 33 23.6
Beginning of centre line; central eclipse begins	10 47.5	W 58 19.1	N 34 07.4
Beginning of northern limit of umbra	10 47.9	W 57 57.5	N 34 51.4
Beginning of southern limit of penumbra	10 50.1	W 73 11.6	N 4 29.4
Beginning of northern limit of penumbra	11 56.4	W 7 19.7	N 67 41.9
Central eclipse at local apparent noon	12 19.6	W 7 23.1	N 2 11.2
End of northern limit of penumbra	13 04.7	E 37 02.8	N 54 04.3
End of southern limit of penumbra	14 10.5	E 63 37.9	S 20 25.5
End of northern limit of umbra	14 12.9	E 50 00.3	N 10 21.1
End of centre line; central eclipse ends	14 13.3	E 50 14.3	N 9 34.0
End of southern limit of umbra	14 13.7	E 50 28.3	N 8 47.0
⊙ Eclipse ends; last contact with Earth	15 19.9	E 36 57.4	N 1 25.9